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(54) ALKALINE BATTERY

(57) The present invention provides an alkaline battery suitable for use as a primary or secondary battery as a power source of electronic appliances. The battery is excellent in discharge characteristics under a heavy load and in cycle characteristics.

The alkaline battery (100) comprises a cathode mix (3) containing β -nickel oxy-hydroxide, an anode mix (5) containing zinc as a main component of anode active material, and an alkali solution as an electrolyte, wherein the cathode mix (3) includes a mixture of β -nickel oxy-hydroxide, graphite powder, and a potassium hydroxide solution in a given weight ratio. The β -nickel oxy-hydroxide is prepared by chemical oxidation and has an approximately spherical shape of particle with a mean particle size in the range of 5 to 50 μ m.

DISCHARSE TIME CURVE OF B-HIOOH PREPARED BY CHEMICAL OXIDATION

DISCHARSE TIME CURVE OF T-HIOOH PREPARED BY CHEMICAL OXIDATION

TIME (min) 30

20

10

5 20 35 50

WEAN PARTICLE SIZE (u.m.)